

Stress Mediation Advisory Leaflet No. 4

Bradán Padina Feed Supplement

What is Bradán Padina™

Bradán Padina™ is a patented extract of the Mediterranean marine alga *Padina pavonica*. This plant has the ability to secrete a calcified surface so that mature fronds are hard and resemble coral. Extracts of the young fronds contain substances which in the laboratory have been shown to improve the ability of human and animal cells to uptake calcium and it also enhances the production of ‘front-line’ collagens III and IV. Thus it has two principal benefits when included in the diet:

- it restores the synthesis of collagens and glycoaminoglycans, substances that form the strength of the skin and retain water and minerals in the skin, bone and cartilage.
- It enhances calcium binding essential for bones joints and scales.

These properties have allowed the development of various human nutritional products and lotions which enhance fingernail strength and improve aging skin, leading to its being compared to “Botox in a Bottle”.

Recently research in the poultry and aquaculture industries have led to the development of Padina derived animal feed supplements. Registered with the EU and certified by FEMAS, they have shown considerably value in enhancing the shell thickness in eggs and improving skin and bone structure in laying hens.

In fish, recent trials have shown that dietary inclusion of Bradán Padina™ extract improves growth and food conversion rate at all stages in the growth cycle.

In addition, field trials have shown feeding it can lead to dramatic improvements in skin condition and wound healing. Salmon with cold water ulcer disease and Koi carp with poor growth and skin lesions have been shown to improve rapidly when Bradán Padina™ is fed after an initial dose of Pro-TEX™ stress modulator.

In particular Bradán Padina™ supplement in oil has been shown to increase feed intake and growth at low temperatures when fish are inappetent and growth is normally poor. Thus it is often used when fish have not performed well and growth is required during winter or where there are fin rot or other skin conditions present in fish which are on limited appetites.

Presentation and Application.

Bradan Padina™ is available as a powder in mannitol for inclusion in dietary formulations at 0.01% of daily intake or as a suspension in fish oil, which is diluted tenfold with further fish oil on the farm and applied as a 0.1% top dressing to supplement the feed. Bradan Padina™ is not a medicine and not subject to the medicines in-feed regulations.

Measure 200 ml of Padina™. Mix with two litres of fish oil.

Mix this oil complex onto 350kg feed either by spraying or mixing by hand. Mix this with whatever further amount of feed is to be fed that day. It is important to mix thoroughly and a small cement mixer is often used to mix as this helps ensure every fish will get a dose.

Endorsements of the use of Bradan Padina™

1. Letter from Mr Ian Rockley, Nottingham.

Meadow Vale Fisheries,
Calverton,
Nottingham,
NG14 6GG.
1/6/2008.

Dear Professor Roberts,

As agreed I am reporting on the results of feeding Padina as a top coating to the 300 young Koi carp which we discussed.

The result has been much better than I had expected. The fish were, as you know, not performing as well as I had hoped and were only averaging 93grams, with a lot of stragglers. I put them on to the Padina dressed feed two months ago and there was an immediate improvement in feeding response.

At weighing last week there was an average growth improvement of 50gram and some had even doubled in weight. The others we did not supplement were still performing poorly.

More unexpected was the improvement in the skin, fins and scales which were brighter, more mucousy and had a sheen to them. The scales were particularly glossy, almost glowing. I certainly would endorse the product and purchase it again for use with show fish or with fish on which I wished to speed up growth a bit.

Yours Sincerely,

Ian Rockley.